

**SYSTEM AND METHOD FOR  
CONTROLLING TRANSMITTER OUTPUT  
LEVELS IN A WIRELESS COMMUNICATIONS DEVICE**

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**ABSTRACT OF THE INVENTION**

A system and method are provided for controlling transmitter output levels in a wireless communications device. The method comprises: maintaining a table of initial transmit bias control values cross-referenced to transmitter output levels; selecting transmitter output levels; supplying an initial transmit bias control value from the table corresponding to a selected transmitter output level; generating an initial transmitter output level; measuring the transmitter output level; creating an adjusted transmit bias control value in response to the measured transmitter output level, and to a reference value; using the difference between the initial transmit bias control value and the corresponding adjusted transmit bias control value to create an error value; saving the error value; and adding the error value to a subsequent initial transmit bias control value.